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## ABSTRACT

Ohio University's impact assessment program is described, with emphasis on the use of long-term (5- and 10-year) alumni outcomes in complementing value-added and academic/social integration information. The university has integrated its alumni studies into its institutional impact project and has focused on both university-wide and college-specific information. The first section of the Alumni Study covered traditional alumni outcomes, such as types of jobs held, salary, and employment satisfaction. Included were questions about 14 competencies that the student needed at work and the extent to which they were developed at Ohio University. Additional questions concerned respondents' programs of study, academic aspirations, and the academic colleges within Ohio University. Selected results of the Alumni Study are considered to illustrate how information is interpreted. Examples are drawn from the traditional alumni outcomes, competencies needed and developed, and college-specific outcomes information. Alumni outcomes information is used in academic program review, institutional planning and budget review, student retention programs, accreditation review and self-study, student recruitment, and career planning/placement. 10 references. (SW)

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The Use of Alumni Outcomes in a Multidimensional  
Institutional Impact Assessment Program

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### Abstract

Assessment of student outcomes has taken three major forms at Ohio University since 1981. These forms are value-added student testing, measures of social and academic integration of students, and measures of alumni outcomes. This paper provides an overview of the University's impact assessment program, but the main focus of the presentation is on the use of long-term (five- and ten-year) alumni outcomes in complementing value-added and academic/social integration information. This institution has taken a unique approach to alumni outcomes studies by integrating its alumni studies into its institutional impact project and by focusing on both university-wide and college-specific information.

The Use of Alumni Outcomes in a Multidimensional  
Institutional Impact Assessment Program

Alumni surveys have been used by colleges and universities for many years for a variety of reasons (McClain and Krueger, 1985; Pace, 1979), and they have been recommended to be used in assessing quality or excellence (Study Group on the Conditions of Excellence in Higher Education, 1984). Indeed, they provide administrators with crucial information about "the place of graduates in the world of work and their judgments about the college experience" (Wilson, 1982, p. 4). Surveys of alumni use measures of institutional productivity that can be compared across different institutions. Ohio University has taken a unique approach to incorporating alumni survey information into its overall institutional impact assessment program. This paper describes an overview of the University's impact assessment program with a focus on alumni outcomes.

Pace (1979) identified ten landmark alumni studies that provided evidence that alumni outcomes can be used to assess the impact of an institution on its students. Many of these studies addressed similar issues. These issues are job-related outcomes, such as occupational level, salary, and job satisfaction; and educational outcomes, such as satisfaction with the educational experience, relationship of one's job to one's major program of study, and the relevance of one's major to one's career goals (Pace, 1979, p. 110). Surveys of alumni are perhaps the most widely used nonstandardized outcomes measure that share similar questions across different institutions.

Alumni outcomes are being used increasingly in multi-dimensional assessment programs (Harris, 1985; Hartle, 1985). For example, Northeast Missouri State University uses alumni surveys to provide information about educational goals, perceptions of the university, and progress toward specific personal objectives and institutional outcomes, along with other assessment measures, such as value-added testing. Northeast Missouri State has been using alumni outcomes information since 1975, and it has established a large base of information to identify trends in its impact on students (McClain and Krueger, 1985).

The National Center for Higher Education Management Systems has made suggestions for ways colleges and universities should use alumni outcomes information. First, alumni outcomes provide information to academic planners about what happens to students after graduation so that decisions can be made about the curriculum, faculty roles, and teaching methods. Second, identification of alumni outcomes may provide evidence of problems in the curriculum, course content, and major requirements. Third, alumni outcomes provide guidance for the formation and operation of various student services areas. Fourth, alumni outcomes provide information related to alumni and public relations issues. Fifth, alumni outcomes, through the above uses, can provide information to assist in resource allocation decisions and institutional planning decisions (National Center for Higher Education Management Systems, 1981, p. 6).

Ohio University has a large set of alumni data with which to assist its planning. The data that are available are six years of mailed survey data from five- and ten-year graduates of the University. The results have been distributed as individual reports, and efforts are continually made to incorporate results into other institutional assessment presentations.

In an earlier stage of this project, Wilson (1982) identified several reasons for assessing alumni outcomes at Ohio University. These reasons can be divided into internal and external reasons. Internally, they are used by academic colleges to make curriculum and faculty decisions. They are used for marketing programs in the admissions office to publicize successes of graduates. They are used in the Career Planning and Placement Office to benefit current students seeking employment by publicizing successes of graduates and employment trends.

External reasons for using alumni outcomes include providing evidence for the necessity of an Ohio University education for public relations purposes. Alumni outcomes are used to provide evidence for justifications of public expenditures. They are used to assist departments in accreditation reviews. Finally, they can be used to establish precedents for the state governing board for identifying outcomes of education (Wilson, 1982).

Ohio University's institutional impact assessment program is a broad program that provides information related to the goals outlined in its "Ten-Year Educational Plan." In 1977 the Ohio University Board of Trustees formally adopted "The University Educational Plan for 1977-1987" as a guide for planning and

program development. In Spring 1981 the president of the University called for a review of the plan, which included assessment of progress in achieving educational goals. In 1981 the president established the Institutional Impact Committee to formalize an assessment program that would provide information about the impact of the University on its students. The Committee devised a multidimensional impact assessment program, consisting of three measures. First, the University uses longitudinal value-added testing through the use of the ACT College Outcomes Measurement Project (COMP) to assess the impact of its general education program on its students. Second, the University uses a longitudinal study of its freshmen and seniors to assess the levels of academic and social integration and involvement that students experience. Third, the University uses the assessment of alumni outcomes to provide information about how its students succeed after leaving Ohio University.

One of the recommendations coming from the Institutional Impact Committee was that the University carry out a systematic study of its alumni to obtain information regarding its programs and the achievements of its graduates. Two types of alumni data were sought. First, short-term outcomes data on graduates were collected within one year of graduation. Second, long-term outcomes data on graduates who had been out of school five and ten years, respectively, were collected. This paper presents results of the latter study. The Office of Institutional Research at Ohio University has responsibility for conducting the Alumni Study.



The remainder of this paper will present unique aspects of Ohio University's alumni outcomes assessment. Examples of results and implementation strategies are presented.

#### Method

The Alumni Study collected information on a mailed questionnaire divided into three major sections. The first section asked questions about traditional alumni outcomes, such as types of jobs held, employment status, salary, employment satisfaction, nature of employment responsibilities, relevance of educational experience to employment, and problems in seeking employment. There was also a group of questions dealing with various competencies needed and developed.

The questions dealing with competencies asked the respondents to evaluate 14 different competencies in terms of whether each was needed and the extent to which each was developed at Ohio University. This section of the questionnaire was developed by and used in the Associated Colleges of the Midwest graduates survey (Wishart and Rossmann, 1977). The competencies that were included were the following: ability to think analytically, ability to apply knowledge from my major field to new problems, ability to acquire new skills and understanding on my own, ability to write well, ability to communicate effectively orally, ability to evaluate and choose between alternative courses of action, ability to formulate creative and original ideas and solutions, ability to convey meaning through artistic and creative expression, ability to cope with complex moral and ethical issues, ability to place current problems in historical,

cultural, and philosophical perspective, sensitivity to feelings and perceptions of others, ability to utilize political process, ability to organize and supervise work of others, and the ability to use the computer as an analytical tool.

The second section of the questionnaire asked questions about respondents' programs of study and the current satisfaction with their undergraduate programs at Ohio University. Items asked about additional degrees received or hoped for, ratings of the education received at Ohio University, and changes that respondents would make in their education if they were given the chance to do it over again.

In the last two years of the study, each of the eight academic colleges at Ohio University participated in questionnaire preparation. The third section of the questionnaire contained college-specific questions, which included questions specific to each college's disciplines and programs.

College-specific alumni data was needed for several reasons. They were involved at the start by helping prepare research questions to be addressed in the questionnaire. The Institutional Research staff desired to coordinate collection of alumni outcomes information because many of the academic colleges at Ohio University had been collecting their own alumni data. These collection efforts were being done in various levels. There was no coordination of data collection and analysis; hence there was no synthesis of information beyond the college level. Data collection efforts were being duplicated by different colleges. Some of the colleges lacked the proper resources to do

adequate alumni studies.

Seven separate questionnaires were prepared; a section of each questionnaire was reserved for college-specific questions. The College of Arts and Sciences section included items involving student services and non-major course requirements. The College of Business Administration section included items involving teaching and advising, and it asked about student organization participation. The College of Education section had 37 items that it used previously in a questionnaire that asked detailed information about competencies needed in education professions. The College of Engineering section included items involving academic program, availability and quality of equipment, and non-major course requirements. The College of Fine Arts section included items involving employment opportunities in the arts, and career preparation for employment in the arts. The College of Health and Human Services section had items related to continuing education opportunities after graduating, participation in professional organizations, use of microcomputers, and contacts with prospective students. The University College section asked questions about general education requirements, student services, and evaluation of the general studies degree.

In each of the mailings a questionnaire, return envelope, and personal letter from the president of the university were included. Since 1982 six classes have been surveyed. In the first four years the questionnaire was mailed to random samples of Ohio University alumni who had received the baccalaureate

degree five and ten years earlier. In 1986 the entire populations of the classes of 1978 and 1979 were surveyed (for which addresses were available). The average response rate for all years of the study was about 50 percent. A second, follow-up mailing was conducted in each year of the study. Demographic information was obtained for each respondent from the student data base at Ohio University, and respondents were judged to be representative of the graduating classes in terms of sex, academic college, and race.

The entire populations of the 1978 and 1979 classes were surveyed in order to generate a large enough response pool to be able to break the analysis down by academic college and by some of the larger, professional academic departments (accounting, management, computer science in business, telecommunications, journalism, and elementary education).

### Results

Brief results are presented here to provide examples of how information is interpreted. Examples will be drawn from the Alumni Study in three sections--traditional alumni study outcomes, competencies needed and developed, and college-specific outcomes information.

#### Traditional Alumni Study Outcomes.

Reported salaries of respondents exceeded average United States and Ohio salaries as reported in U.S. Census publications. Most graduates were employed full-time in business/industry or education. The older graduates indicated that they held more executive or managerial positions in their current jobs, but

comparatively, a higher percentage of younger graduates held executive or managerial positions in their first jobs. Yet in terms of employment responsibility, supervision, policy-making, and status/prestige were rated similarly by all classes. Also, more of the recent graduates indicated that they felt that they had more prospects for advancement than the earlier graduates did. The number of teachers decreased from 1971 to 1979 both as a first job and as a current job. The mobility away from teaching is apparent in the trend of annual salaries; the earlier graduates were earning more money per year than the later graduates. It also appears as though a number of graduates left teaching as their first job to go into other fields.

Most graduates reported that they were at least somewhat satisfied with their current job and with their career progress, although the more recent graduates reported slightly more dissatisfaction than earlier graduates. However, about half of the graduates said they would like to remain with their current employer for the foreseeable future.

Most of the graduates said they felt that their educational experiences at Ohio University were well-utilized in their employment. Most educational experiences were rated helpful by graduates in all classes, but extracurricular activities, work experience/practicum at Ohio University, and elective courses received the greatest amount of "not helpful" ratings.

The biggest problems the graduates indicated that they perceived in seeking employment after receiving their bachelor's degree was a tight job market, both generally and within their

field of specialization. Finding a job with desirable characteristics was the biggest problem for about 20 percent of the graduates. Not knowing what to do was the biggest problem for about ten percent of the graduates. Educational qualifications as a problem was mentioned by only a few of the graduates. No more than 2.5 percent of the graduates expressed dissatisfaction with programs such as major courses, general education, electives, or extracurricular activities.

Graduates were asked if they were considering enrolling in a bachelor's degree program again what they would change. More than half of the graduates said there was at least some chance they would make no changes, and more of the recent graduates said they would make no changes. Yet about one-third of the graduates said they would change their major field or their specialization, less than ten percent of the graduates said there was an excellent chance they would attend an institution other than Ohio University, and most graduates said they would include an internship or cooperative educational experience while in school.

Competencies Needed and Developed.

Graduates responded to questions about competencies needed in their jobs and how well they felt those competencies were developed at Ohio University. Graduates in all classes indicated that the following competencies were needed the most: ability to think analytically, acquire new skills and understanding, formulate creative and original ideas and solutions, communicate orally, evaluate and choose between different courses of action, and sensitivity to feelings of others. They rated the following

competencies as the ones that were needed the least: ability to use the computer as an analytical tool, utilize the political process, convey meaning through artistic and creative expression, cope with complex moral issues, and the ability to place current problems into historical, cultural, and philosophical perspective. There was a positive relationship between the perceived necessity of these competencies and how the graduates evaluated Ohio University's effectiveness in developing them. This finding is especially true for areas that were rated not as necessary as other areas; in these areas Ohio University was given lower ratings in effectiveness in developing them. Either the graduates did not feel they were needed because Ohio University did not prepare them well, or Ohio University was not able to prepare these graduates because they did not feel they were needed.

#### College-Specific Alumni Outcomes.

A brief summary of highlights of college-specific questions is presented for each of the academic colleges at Ohio University.

The College of Arts and Sciences questions on non-major requirements focused on foreign language, humanities, social sciences, and natural sciences relevance, value to educational experience, and providing career skills. In general, language was rated the least relevant and the least helpful in career skills, yet most graduates said that it provided value to their educational experience. Most of the respondents rated humanities, social science, and natural science requirements as

relevant, helpful in terms of career skills, and of educational value.

The College of Business Administration questions on teaching and advising revealed that graduates were more satisfied with teaching than with academic advising. Most respondents indicated that major courses were relevant, but fewer of them said that "faculty brought the real world into the classroom."

The College of Education questions on necessity for teaching and effectiveness of Ohio University in developing various educational competencies produced results that were similar to the university-wide competency questions. Competencies related to communicating and presenting subject material were rated the most effective of all the competencies presented. There was a positive relationship between ratings of necessity and ratings of effectiveness of the competencies.

Most of the College of Fine Arts respondents indicated that faculty were not well informed of employment opportunities. Most of them said that they would continue to pursue a career in the arts, but most said that if they had to do it over again they would augment their fine arts major with an additional area of study.

In the College of Health and Human Services, most of the respondents said they received continuing education through national conferences and employer-sponsored inservice and workshops. Respondents indicated that they participated in local, national, and state professional organizations (in that order). More of the 1979 graduates than 1978 graduates indicated



that they used microcomputers, either at home or at work. Most of these respondents said they used a microcomputer for word processing.

In the University College, respondents indicated that they should have taken more business, communication, and computer science courses for general education requirements. Half of the respondents indicated that they have had to justify the title of their general studies degree (BGS).

#### Discussion

The use of alumni outcomes, along with the other outcomes measures used at Ohio University, follows the suggestions by Ewell (1983). These suggestions consist of academic program review and evaluation, retention, institutional planning, accreditation self-studies, and marketing and public relations.

The use of student and/or graduate feedback in academic program review is gaining popularity on many campuses. At Ohio University student outcomes are used for assessing the effectiveness of the general education program. The dean of Ohio University's University College has been involved with the Office of Institutional Research in identifying general education outcomes through the use of the ACT COMP. Alumni study results complement COMP results by providing direct responses to questions about the general education program and about what competencies are needed and developed that the general education program strives to educate. The recent use of college-specific questions provides each of the academic colleges direct answers to questions they ask as part of their curriculum review. Many

of the colleges asked questions about non-major course requirements that each has and about teaching and advising.

The use of student outcomes in student retention programs takes place largely within Ohio University's Student Involvement Study. Individual potential leavers are identified from questionnaires students complete in the spring of their freshman year. Student development staff members attempt to intervene with these students and provide personal assistance with problems related to attrition. The Alumni Study complements this effort by providing student development staff members information about characteristics of (successful) completers. This information helps them as they assist individual students and as they plan additional retention programs. Some of the college specific questions addressed student involvement and retention. For example, the College of Business Administration asked questions about student organization membership.

Alumni study outcomes information is used in institutional planning and budget review at several levels at Ohio University. At the presidential and provost level, alumni information provides guidance in terms of strengths and weaknesses of various aspects of the whole university. Ohio University's "University Planning and Advisory Council" (UPAC) receives alumni outcomes information and uses it in the context of specific budget requests for new ventures for the University. College-specific information is used at the college level of planning. For example, the College of Engineering and Technology asked questions about laboratory equipment, condition, availability,

quantity, etc.), and the College of Health and Human Services asked questions that will guide its use of microcomputers in instruction.

Alumni outcomes information has been used successfully by four academic departments at Ohio University in their proposals for Ohio Board of Regents "Program Excellence" awards. The Honors Tutorial "College," and the departments of journalism, telecommunications, and visual communications all used alumni outcomes information to document the success of their students in this state-wide academic competition for enrichment grants. A total of about \$650,000 has been awarded to these departments at Ohio University.

Alumni outcomes are used for accreditation review and self-study. Traditional alumni study information, such as salary, job placement, type of occupational area, and continuing education, are used by Ohio University to demonstrate follow-up of students and to document student success to accrediting agencies. College-specific questions are used for the same purpose. For example, the College of Education asked 37 questions related to aspects of education instruction that have been used in NCATE accreditation reviews.

Alumni outcomes are of great value in marketing, recruiting, career planning/placement, and public relations efforts. Alumni outcomes information provides evidence of student success that can be documented for use in external publications. The collection of alumni information demonstrates that the University is interested in keeping track of its students beyond graduation.

Alumni outcomes information is used by enrollment planners in that it provides characteristics of completers so that those characteristics may be sought in recruiting new students. Alumni outcomes information gives career planning/placement staff members realistic information about job trends and career paths of Ohio University graduates to communicate to current students who are about to enter the job search process.

Efforts to integrate information from the three dimensions of outcomes at Ohio University are ongoing. Integration of information is essential in assessing institutional impact so that no single type of information is used exclusively; results from various studies complement each other, and in some cases they cross-validate each other. This multidimensional use is important because identification of outcomes of a college or university education is extremely complex (Terenzini, 1986).

Outcomes information is used at many levels at Ohio University. Its use was developed by a university-wide committee under presidential direction, so there has been a demand for this information at the highest level. Reports of individual studies are communicated, and summaries that integrate findings are distributed to a variety of university offices, such as the president, provost, trustees, college deans, UPAC, alumni affairs, student development, and university relations.

This paper has several implications for institutional researchers. It focuses on practical use of the traditional alumni survey to provide valuable information related to the impact of the institution on its graduates. It addresses the

relationship between alumni outcomes and other types of assessment measures. It demonstrates the use of university-wide and college-specific outcomes information. Uses of college-specific information may be useful to institutional researchers who are interested in more specialized outcomes measures. Finally, it provides a timely model for those who are unfamiliar with institutional impact studies.

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